

CLAIMS

I/we claim:

- [c1] 1. A method in a computer system for logging data, the method comprising:
- selecting a sequence of components for processing the data, each component having an input format and an output format such that the output format of a component is compatible with the input format of the next component in the sequence;
 - invoking each of the components in sequence wherein output data of a component is input data for the next component in the sequence;
 - and
 - recording amount of data processed by each component.
- [c2] 2. The method of claim 1 including recording type of data processed by each component.
- [c3] 3. The method of claim 1 wherein a mapping from components to the recorded amount of data is used to determine a fee for the processing of the data.
- [c4] 4. The method of claim 1 wherein the components are protocols and the amount of data is recorded at the protocol level.
- [c5] 5. The method of claim 1 wherein the components are protocols with sessions and the amount of data is recorded at the session level.
- [c6] 6. The method of claim 1 wherein the components are protocols with edges and the amount of data is recorded at the edge level.

- [c7] 7. The method of claim 1 wherein the amount of data processed by a path is recorded.
- [c8] 8. The method of claim 1 including recording processing time of the data.
- [c9] 9. The method of claim 1 wherein a source of the data is identifiable from the recorded data.
- [c10] 10. The method of claim 1 wherein the recorded information is used to identify sources of advertisements.
- [c11] 11. The method of claim 1 wherein a source of data is uniquely identifiable from a component that processes the data.
- [c12] 12. The method of claim 1 including recording processing time of a component and allocating computer system resources based on the recorded processing time.
- [c13] 13. A method in a computer system for billing for processing of data, the method comprising:
 identifying a sequence of components for processing the data based on a source format of the data and a target format of the data;
 logging amount of data processed by each component in the sequence;
 and
 determining a price for the processing based on the logged amount processed by a component.
- [c14] 14. The method of claim 13 including logging of processing time of each component.

- [c15] 15. The method of claim 13 wherein a component in the sequence uniquely identifies a source of the data.
- [c16] 16. The method of claim 13 wherein the data is an advertisement.
- [c17] 17. The method of claim 13 wherein the component is a protocol.
- [c18] 18. The method of claim 13 wherein the logging at either the session or path level.
- [c19] 19. A method in a computer system for identifying a source of data, the method comprising:
 identifying a sequence of components for processing that data; and
 invoking each of the components in sequence wherein one component uniquely identifies the source of the data and wherein the amount of data associated with the identified source is logged.
- [c20] 20. The method of claim 19 including billing based on the identified source.
- [c21] 21. The method of claim 19 wherein the data is an advertisement provided by the identified source.
- [c22] 22. The method of claim 19 including logging timing information.
- [c23] 23. The method of claim 22 wherein computer resources are allocated to the components based on the logged timing information.

